# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Foster, Robert A.

Assignee:

Financial Systems Technology (Intellectual Property) Pty. Ltd.

Title:

Data Processing System For Pricing, Costing And Billing Of Financial

Transactions

Serial No.:

09/183,335

Filing Date:

October 30, 1998

Examiner:

J. Borlinghaus

Group Art Unit:

3693

Docket No.:

M-7085 US

San Jose, California August 16, 2007

Via EFS-Web Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## (A) REPLY BRIEF

Dear Sir:

Pursuant to 37 C.F.R. § 41.41 and in reply to the Examiner's Answer of June 19,

2007, Appellant submits this Reply Brief.

# (B) STATUS OF CLAIMS

Claims 1-29 are pending, rejected and appealed.

### (C) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- (i) Rejection of Claims 1-2, 4-16 and 19-22 under 35 U.S.C. § 103(a) as being unpatentable over disclosed prior art ("Disclosed Prior Art") and pp. 35-60, 177-178, 191-210 and 295-309 of *Expert Systems for Experts*, published by John Wiley & Sons, 1988 ("Parsaye"); and
- (ii) Rejection of Claims 3, 17-18 and 23-29 under 35 U.S.C. § 103(a) as being unpatentable over Disclosed Prior Art and Parsaye, and further in view of pp. 31, 46-47, 113 and 133 of *Expert Systems: the User Interface*, published by Albex Publishing Corp., 1988 ("Hendler")

#### (D) ARGUMENT

(i) Rejection of Claims 1-2, 4-16 and 19-22 under 35 U.S.C. § 103(a) as being unpatentable over disclosed prior art ("Disclosed Prior Art") and pp. 35-60, 177-178, 191-210 and 295-309 of *Expert Systems for Experts*, published by John Wiley & Sons, 1988 ("Parsaye");

In the Examiner's Answer, the Examiner states:

Examiner asserts that "fee arrangements," as disclosed by the Appellant, reads on the claimed "price tables", as the fees contained within the fee arrangements are equivalent to the prices contained within the price tables.

Appellant's Appeal Brief of February 12, 2007, the Disclosed Prior Art merely discusses the complexity of existing fee arrangements used by financial services companies (FSCs). With respect to FSCs, a "fee arrangement" is an arrangement between an FSC and a customer based on which a price is determined for a service rendered -- or a product supplied -- by the FSC to the customer. A "product" in this context is typically not a physical object. A typical product would be a mortgage loan or an investment account. Such a product is essentially a bundle of services. Thus, in the context of Appellant's Specification (i.e., transactions at FSCs), a product is typically priced according to the component services of the financial transaction, on a per financial transaction basis, for services rendered over a billing period, or both. Therefore, the Disclosed Prior Art provides no disclosure or suggestions as to what data structure or data structures may be used in a data processing system to represent such a complex situation, stating rather that there is a need for an ability to calculate pricing:

Fee arrangements can take many shapes, e.g., by

product; by time of submission; by specified execution time; by window of time between submission and execution; by transaction value; by pre assigned payment slots; and/or by some combination of these. In addition, customers are mobile and shop for the best deals. The methods of payment, timings of payment, cash management practices and credit requirements change. Also, competitors pricing strategies change. In response to these changes, FSCs need the ability to calculate pricing accordingly.

As to "price tables," the Examiner's construction ignores the meaning associated with the term "price table" as used in Appellant's Specification and recited in the claims. As explained at Appellant's Specification, at page 30, lines 30-37, a "price table" refers to a specific data structure in a data processing system, which structure is governed by a "schema":

The Price Table can contain prices or costs, mutually exclusive, depending on the Schema of the Price Table. For example, a Schema of "COST" means that the Price Table contains only costs; a Schema of "STD" or "PRIC" means that the Price Table contains only prices'; a Schema of "BNDL" means a Price Table for bundled pricing which contains prices to be used for the Pricing Method known as Cross CAA/Bundle Tiering.

Price tables are therefore data structures for storing prices and costs. Price tables do not constitute fee agreements. To calculate a price for an FSC product in a financial transaction, many price tables and many prices for different component services may be required. Thus, the Examiner is incorrect to read fee arrangements on price tables. Therefore, the Examiner's contention that the "fee arrangements" of the Disclosed Prior Art reads on the claimed "price tables" is contrary to the rules of claim construction, as it is inconsistent with the meaning of "price table" used in Appellant's Specification.

The Examiner similarly contends that the Disclosed Prior Art discloses "product rules"

recited in the claims, without regard to the meaning of that term as used in Appellant's Specification:

Examiner has interpreted "product rules," as the identification of the proper "fee arrangement," such as by product designation or by time of submission, as disclosed by the Appellant, as such identification would control the fee arrangement to be utilized.

Furthermore, Examiner asserts that Disclosed Prior Art discloses "a plurality of product rules each applicable to one or more of said financial transactions, wherein each of said product rules is linked to one of said price tables," as claimed in Claim 1. As disclosed by Disclosed Prior Art there are many identifiers, such as Product designations or time of submission, each applicable to one or more of said financial transactions, wherein each of said identifiers is linked to one of said fee arrangements.

Appellant's Specification at page 4, lines 19-31, the term "product rule" is not merely an identification of a "fee arrangement," but an entity in a data processing system which includes many attributes that represent different types of information, such as its name, active status, how pricing and billing is to be performed and display only information about the target entities. In fact, as mentioned above, many product rules in conjunction with many price tables may be required to price a single product for a customer, especially where the customer's entire relationship with the FSC may be a factor for pricing (e.g., a bank may charge a lower interest rate for an automobile loan for a customer who maintains his mortgage and investment accounts at the bank). Thus, as the Disclosed Prior Art does not concern a data processing system, the Examiner's contention that the Disclosed Prior Art suggests product rules is contrary to the rules of claim construction, as the meaning given to the term "product rules" by the Examiner is inconsistent with its use in Appellant's Specification.

The Examiner found in Parsaye teachings regarding the tables and rules in an expert system. However, the Examiner did not find any teachings in the Disclosed Prior Art that would enable one of ordinary skill to transform the "fee arrangement" in the Disclosed Prior Art to Parsaye's tables (frames) and rules, much less transforming "fee arrangement" into the very particularized "price tables" and "product rules" taught in Appellant's Specification.

Undaunted, using hindsight from Appellant's claims, the Examiner merely supposes such knowledge in the person of ordinary skill:

Examiner asserts that if a user was to convert a "fee arrangement," as disclosed by Disclosed Prior Art, into a "table" or "frame" located within a database system, as disclosed by Parsaye, such would be a "price table" located within a "database system," as claimed by the Appellant.

Examiner further asserts that if a user was to access fee information contained within such an electronic price table, a "rule" would need to be employed for retrieval of such information, as disclosed by Parsaye, in the same manner that an identifier, such as a product designation or time of submission, is utilized in conjunction with fee arrangements, as disclosed by Disclosed Prior Art.

Thus, the Examiner attempts to create a teaching where there is none. The Examiner provides no justification from the prior art as to why one of ordinary skill in the art would be motivated and enabled to "convert" a fee arrangement into a "table" data structure. In addition, the Examiner further does not justify from the prior art why or how, having devised such a table, such a person of ordinary skill would create a "product rule" data structure to access such a table data structure. The Examiner's rejection is therefore based on an impermissible hindsight reconstruction.

Recognizing the deficiency in his arguments, the Examiner contends that the Disclosed Prior Art and Parsaye should be read "as a whole":

Examiner asserts that "one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references." *In re Keller, Terry, and Davies, 208 USPQ 871, 882 (CCPA 1981)*. In the instant case, applicant refutes each prior art reference individually, rather than viewing them in combination, in light of the totality of their combined teachings.

Appellant respectfully submits that the Examiner is in error. Even assuming the Examiner's contentions that the Disclosed Prior Art teaches "fee arrangements" and Parsaye teaches use of tables and rules of an expert system, the combined teachings of the Disclosed Prior Art and Parsaye "as a whole" simply would not provide the particularized data structures of price tables and product rules recited in Appellant's claims.

Accordingly, Appellant submits that Claim 1 and dependent Claims 2, 4-16 and 19-22 are each allowable over the Disclosed Prior Art in view of Parsaye. Reversal of the Examiner's rejection under 35 U.S.C. § 103(a) of Claims 1-2, 4-15 and 19-22 is therefore requested.

(ii) Rejection of Claims 3, 17-18 and 23-29 under 35 U.S.C. § 103(a) as being unpatentable over Disclosed Prior Art and Parsaye, and further in view of pp. 31, 46-47, 113 and 133 of *Expert Systems: the User Interface*, published by Albex Publishing Corp., 1988 ("Hendler")

In the Examiner's Answer, the Examiner states:

In response to Appellant's implied criticism of the motivation to utilize Hendler, Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Disclosed Prior Art and Parsaye by incorporating the standard conventions and procedures commonly utilized in rule-based systems, as disclosed by Hendler, as "to speed up and clarify browsing" (see p. 113) or to otherwise present a better user interface for use with the rule-based system

Appellant respectfully submits that the Examiner is in error. Claims 3, 17 and 23 each further recite particularized limitations and mandatory attributes for the "product rules":

3. The method of Claim 1, wherein each of said product rules comprises:

a name of said product rule;

a status of said product rule;

pricing and billing information, including a link to one of said price tables; and

display only information.

\* \* \*

17. The method of Claim 1, wherein said product rule further comprises a plurality of mandatory attributes, said mandatory attributes include an identifier for said product rule.

\* \* \*

23. A data processing system for pricing a financial transaction, said data processing system comprising:

means for creating a product rule in the data processing system applicable to said financial transaction, said product rule comprises a plurality of mandatory attributes and a plurality of optional attributes;

means for creating a price table in the data processing system;

means for creating a link between said product rule and said price table; and

means for calculating a price for said financial transaction by identifying said product rule and accessing said price table via said link.

As in Parsaye, Hendler's teachings of standard conventions and procedures simply would not disclose or suggest the particularized limitations and mandatory attributes of the

product rules. Hendler's purported benefits of providing improvements of a user interface relate to no teaching or suggestion of these limitations and mandatory attributes.

Accordingly, Appellant submits that Claims 3, 17-18 and 23-29 are allowable over these teachings. Reversal of the Examiner's rejection of Claims 3, 17-18 and 23-29 is therefore requested.

#### Conclusion

For the foregoing reasons, Appellant respectfully submits that all pending claims (i.e., Claims 1-29) are allowable. Reversals of the Examiner's rejections of these claims are therefore requested. If the Board or the Examiner has any questions regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Appellant at 408-392-9250.

Certificate of Transmission: I hereby certify that this correspondence is being transmitted to the United States Patent and Trademark Office (USPTO) via the USPTO's electronic filing system on August 16, 2007.

Respectfully submitted,

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